DESCRIPTION

Emuline® and Red-D Lite-E™ are explosive products especially designed for controlled blasting applications requiring de-coupling of the explosive charge such as pre-splitting, trim blasting or smoothwall technique.

BENEFITS

- Emuline is a continuous length of emulsion packaged in tough film cartridges with an attached line of detonating cord. The continuous length can be easily cut to desired length.

- Red-D Lite-E is an emulsion packaged in rigid paper cartridges with couplers that quickly connect together.

PROPERTIES

<table>
<thead>
<tr>
<th>Product</th>
<th>Density [g/cc]</th>
<th>Pressure [kb]</th>
<th>Water Resistance</th>
<th>VOD [ft/s]</th>
<th>VOD [m/s]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emuline</td>
<td>1.05</td>
<td>57</td>
<td>Excellent</td>
<td>14,000</td>
<td>4,270</td>
</tr>
<tr>
<td>Red-D Lite-E</td>
<td>1.06</td>
<td>58</td>
<td>Excellent</td>
<td>15,000</td>
<td>4,570</td>
</tr>
</tbody>
</table>

PRIMING

*Emuline*: Use a high strength detonator (Rock*Star®, Shock*Star® or equivalent) or A-Cord™ (25 gr/ft) detonating cord secured to the product’s attached detonating cord.

*Red-D Lite-E*: Use a high strength detonator (Rock*Star, Shock*Star or equivalent). If product temperature is below 20° F (-6° C), prime with a minimum of a Gold Nugget™ (8 gm) cast booster. This product is not designed for use with any strength of detonating cord.
PACKAGING

<table>
<thead>
<tr>
<th>Product</th>
<th>Cartridge Size</th>
<th>Cartridge Weight</th>
<th>Case Quantity 50 lb / 22.5 kg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[in] [mm]</td>
<td>[lb/ft] [kg/m]</td>
<td>[ft] [m]</td>
</tr>
<tr>
<td>Emuline</td>
<td>7/8 x 16 22 x 400</td>
<td>0.31 0.47</td>
<td>160 ± 6 48.8 ± 1.8</td>
</tr>
<tr>
<td>Emuline</td>
<td>1 ¼ x 16 32 x 400</td>
<td>0.59 0.88</td>
<td>85 ± 3 25.9 ± 0.9</td>
</tr>
<tr>
<td>Red-D Lite-E</td>
<td>7/8 x 24 22 x 600</td>
<td>0.30 0.43</td>
<td>83</td>
</tr>
</tbody>
</table>

Note: All dimensions and weights are nominal.

STORAGE
Store in accordance with all applicable local, state, provincial and federal laws.

SHELF LIFE
One year from date of manufacture under good storage conditions.

UN CLASSIFICATION
Shipping Name: Explosive, Blasting, Type E
Class & Division: 1.1D
ID Number: UN0241

For more information and service locations in your area, please contact:

Austin Powder Company
25800 Science Park Drive
Cleveland, Ohio, USA 44122

Phone: 1-800-321-0752
Fax: 1-216-464-4418
Web: www.austinpowder.com
Email: info@austinpowder.com

DOT REFERENCE NUMBER
EX-9305177 (Emuline)
EX-1993050177 (Red-D Lite-E)

Disclaimer of Warranties and Limitations of Liabilities

“Products described in this bulletin are sold by Austin Powder Company without warranty; express, implied or statutory or as to MERCHANTABILITY, except as expressly stated in Austin Powder’s straight bill of lading. Under no circumstances shall seller be liable for loss of anticipated profits, consequential damages or incidental damages.”